Executive Summary – Draft Interim Report on Recreation Critical Path Studies

BACKGROUND

The purpose of this report is to provide stakeholders and regulators an update on the status of three recreation studies being conducted in support of relicensing the Oroville project, which is licensed by the Federal Energy Regulatory Commission (FERC Project # 2100). The California Department of Water Resources (DWR) manages the Oroville project for the purposes of water supply, flood control, hydropower generation, and public recreation use. The FERC license for this project expires in January 2007, and the public relicensing process was initiated in June 2000. Through a collaborative process more than 70 related study plans were developed and approved, with study implementation of the earliest studies beginning in spring, 2002.

Nineteen of these study plans involve recreation and socioeconomic issues, and this report provides a status update of the recreation surveys study (SP-R13), the existing recreation use study (SP-R9), and the reservoir boating study (SP-R7). These three studies were initiated on Memorial Day weekend, May 2002, and will end in June 2003. Results in the Interim Report are based on data collected from the end of May until the first week in September 2002. These studies are considered "critical paths" since they supply essential data to several of the other 16 recreation and socioeconomic studies.

The overall objective of each of these three critical path recreation studies is to address the Collaborative's Issue Statement R1 – adequacy of existing recreation facilities, opportunities, and access to accommodate current use and future demand. This information will help determine user preferences, attitudes, levels of satisfaction,

perceptions of crowding, and reasons for visiting or not visiting the Study Area, with the ultimate goal of providing recommendations on protection, mitigation, and enhancement measures (PMEs) that will be included in a new Recreation Plan. Although the study plan mentions a separate interim report for each recreation critical path study (SP-R13, SP-R9, and SP-R7), all three have been instead combined into a single report since there is considerable overlap in the timing, methods used, data collected, and study area.

Study SP-R13 involves conducting a number of recreation surveys. Federal Energy Regulatory Commission (FERC) regulations require a comprehensive recreation plan, and specify that a "well documented user survey is an essential part of a good recreation plan" (FERC 1996). Recreation surveys are an integral part of most hydropower relicensing recreation studies; for this project they are being used to collect information addressing the objectives of many of the 19 different recreation and socioeconomic studies. These surveys gather recreation use information, perceptions of crowding and safety issues, recreation preferences, overall trip satisfaction, and economic expenditure information from reservoir boaters, anglers, and trail users, as well as day user and overnight visitors. This study sought to collect a statistically defensible number of completed surveys for 19 different recreation activity groups.

The survey data collection efforts occur on-site at the study area, as well as via a mail back survey. Additionally, data were collected on-site from recreationists at three other similar sites in northern California during summer, 2002, and from households throughout northern California via a telephone survey. These latter data will support an assessment of unmet demand relative to water-based recreation in northern California (Study SP-R14).

Study SP-R9 focuses on existing recreation use. This study focuses on quantifying existing recreation use (both day and overnight use) within the Study Area. This study complies with FERC regulations requiring estimates of existing and future recreation use at the project, in terms of daytime and overnight visitation, and provides a description of the methods used to estimate use (Subpart F, Section 4.51 of 18 C.F.R.).

Study SP-R7 focuses on reservoir boating. Boating is a major recreation activity in the Study Area, and is directly affected by project operation (particularly by reservoir pool levels). This study documents boating use levels and measures the adequacy of existing recreation facilities, opportunities, and access to accommodate current boating use and future demand. Additionally, this study assesses the impact of project operations on boating-related activities and identifies relationships between recreation area management and reservoir boating.

SURVEY RESULTS

Survey results are reported for visitors to Lake Oroville, visitors to similar recreation sites, and households within 4 zones within northern California and Nevada. For respondents who completed the Oroville on-site survey, most (70%) stated they were regular visitors, and most (79%) visited for 3 days or less. The majority of these individuals visited in summer, but substantial proportions also visited in spring (55%) and fall (41%). The most popular activities engaged in were water-based, and included swimming (16%), motorboating (13%), bank fishing (11%), and waterskiing or wakeboarding (10%). In terms of origin, most visitors (66%) were from Butte County. Respondents to the Oroville on-site survey did not reveal strong feelings about crowding; in fact, 68% indicated they felt "not at all crowded" to "slightly crowded" during their trip.

The on-site survey featured three activity-specific sections: boating, angling, and trail use. Safety was an issue among boaters, with 72% indicating they had experienced an "at risk" encounter while boating in the Lake Oroville area. However, even among boaters, perceived crowding was not high. About 7 in 10 (69%) of boaters indicated they felt not at all to slightly crowded while boating. Overall satisfaction among boaters was relatively high, with almost 80% stating they were somewhat to extremely satisfied with their trip to Lake Oroville. Among anglers, most (60%) were regular visitors to the Lake Oroville area, and most (61%) fished 5 days or less in the Lake Oroville area during the last 6 months. Similar to boaters, anglers did not feel very crowded while recreating in the Lake Oroville area. Angler satisfaction was high, with three-fourths stating they were satisfied with their experience. Finally, trail users who responded to the on-site survey also did not perceive much crowding, with 9 out of 10 indicating they felt not at all to slightly crowded. Their satisfaction levels with trail conditions were very high, with 90% stating they were somewhat to extremely satisfied.

The mailback survey for Lake Oroville contains questions on problems encountered, adequacy of facilities, and economic expenditures (results of the last category will be reported in the interim report for SP-R18). Regarding adequacy of facilities, there were 5 items of most concern: number of docks or temporary moorage, the number of picnic or day use areas, swim areas, boat ramps, and restrooms. For each of these items at least 50% of the respondents indicated more of each facility type was needed. For restrooms more than 80% indicated more of this type of facility was needed. Respondents' overall satisfaction with their trip to the Lake Oroville area was high. More than three-fourths (78%) stated they were somewhat to extremely satisfied.

On-site surveys were also given to visitors to three similar recreation sites in northern California: Lake Berryessa, Black Butte Reservoir, and Lake Shasta. The purpose of these surveys was to compare visitor experiences at other similar recreation sites with visitor experiences in the Lake Oroville area. In short, visitors to these areas did not differ appreciably in their levels of satisfaction or perceived crowding compared to visitors at the Lake Oroville area. More details about these results will be reported at a later date, when the report for SP-R14 is prepared.

A household survey of four areas in northern California and Nevada was conducted to gauge latent demand for water-based recreation, using the Lake Oroville area as the primary destination of interest. For all respondents, about 6 in 10 had visited Lake Oroville before, with a much higher proportion (98%) from the Butte County group. Overall satisfaction for previous visits was fairly high among all respondents, with about three-fourths stating they were somewhat to extremely satisfied with their last visit to the Lake Oroville area. One question on the household survey asked about when respondents last visited the Lake Oroville area. Among those individuals who had not visited in the last two years, major reasons included: prefer other places (32%), too far (20%), and prefer closer locations (11%). Another survey question asked about special events that might motivate first time and existing visitors to visit the Lake Oroville Area more often. For all respondents the top choices were: fishing events (37%), food and beverage events (25%), and water skiing events (24%). Another question asked about the types of facilities that would motivate existing visitors to visit more often and those that had never visited to visit for the first time. For both groups the top 4 items were: a floating restaurant on Lake Oroville, swimming/beach areas, showers, and interpretive centers featuring cultural or natural resources.

EXISTING USE STUDY RESULTS

Observations of the number of vehicles and vehicles with various types of trailers (boat, horse, OHV), and the number of visitors of various types were made by field staff simultaneous to on-site survey efforts. More than 500 such observations were made between May 25 and September 30, 2002 at all of the more than 40 Study Area sites where surveys have been conducted. Most sites were visited between 12 and 25 times, including both weekend and weekday visits. Observations occurred around 8:00 am, 12:00 noon, and 4:00 pm.

This draft interim report provides summary information for five types of recreation areas and a total of 30 different sites. The data obtained provides a reliable base for determining which recreation sites and facilities consistently receive the most visitor use, and for determining the types of use occurring and in what amounts at each site. Maximum and average numbers of observed vehicles, trailers, and visitors can be compared between similar types of recreation sites, for example, boat ramps. Additional data will be available from traffic counters operated by DWR at most sites.

Data are also summarized from four infrared trail use counters that have been in operation at four locations within the Study Area trail system since late August. The counters will remain in operation at those sites through December 2002, at which time they will be relocated. Hourly count data covering about a 100 day period (from August 24 to November 28, 2002) are reported herein. Monthly use totals and daily averages for each month are reported for all four trail locations. These data convey detailed information on the comparative use levels of the four trail segments represented and on changes in use levels through the late summer-early fall season. Among the four sites where counters have been placed, the Bidwell Canyon segment consistently received

the most daily use. Use of that trail segment averaged from about 13 users per day in October to about 26 users per day during the last week of August. The Loafer Creek trail segments received an average of about 8 to 12 users per day through the 100 day period. The Dan Beebe trail segment received slightly less use, averaging 4 to 10 passes per day over that same period. Trail use counts may be slightly higher than actual use, because the counters cannot differentiate the passage of larger animals (such as deer) on the trail.

RESERVOIR BOATING STUDY RESULTS

Reservoir boating study results are summarized to reveal the number and types of boats using each of six zones of Lake Oroville and using the Thermalito Forebay and Afterbay. These data are based on 22 observations of boats conducted from a boat on Lake Oroville and from 13 observations conducted from land vantage points near the Forebay and Afterbay. The observations were conducted on weekend and holiday afternoons between and including the Memorial Day and Labor Day weekends of 2002. Observations were recorded on maps, providing the ability to produce maps depicting boat activity and conduct analysis of boat traffic density in specific areas.

Overall, the boat traffic observations and resulting counts indicate that boat traffic is fairly well distributed at peak use times across most of Lake Oroville and remains at a fairly constant level most of the summer season. Most of the six zones were found to each host from 35 to 75 boats most of the days the counts occurred.

An exception to this is the Middle Fork zone, which extends several miles to the east from the main basin beginning at the Highway 162 bridge. On two dates, this zone was observed to receive much higher use than any other portion of the lake, with nearly 300

boats using the area in both instances. A large portion of the boats were observed to be houseboats and associated smaller craft that congregate on and near shore within several large coves. A similar use pattern was observed on one date on the South Fork zone, peaking with about 155 boats present.

Similar data collected on the Forebay and Afterbay show that the Forebay receives light boat traffic (less than 15 boats at one time) most weekends and the Afterbay receives moderate use (less than 40 boat at one time most weekends, with a holiday peak of about 70 boats).

Future analysis will determine the approximate surface acreage of each zone of Lake Oroville and of the Forebay and Afterbay on the days the counts were conducted, and the density of boat traffic during each count expressed as a number or boats per acre.

FUTURE WORK

Revisions of this draft interim report based on review comments will be completed in February 2003. The final interim report will be available to stakeholders, upon request, at the meeting of the Recreation and Socioeconomics Work Group scheduled for February 27, 2003. Survey and boat count data collection and will continue through May, 2003, and collection of trail counter data will continue through August, 2003. The Draft Final Reports for Study SP-R7 and SP-R9 are to be completed by August, 2003. The Draft Final Report for Study SP-R13 will be completed by November 2003.